

## 10. Saving Plot Images and Data

Panoply includes several ways for saving files to disk, two for plot images and two for data.

### 10.1. Saving a Plot

Plot images may be saved to disk by selecting either the “Save” or “Save as...” item in the File menu. An example of the dialog for selecting the output file name and location is shown in Fig. 10.1.

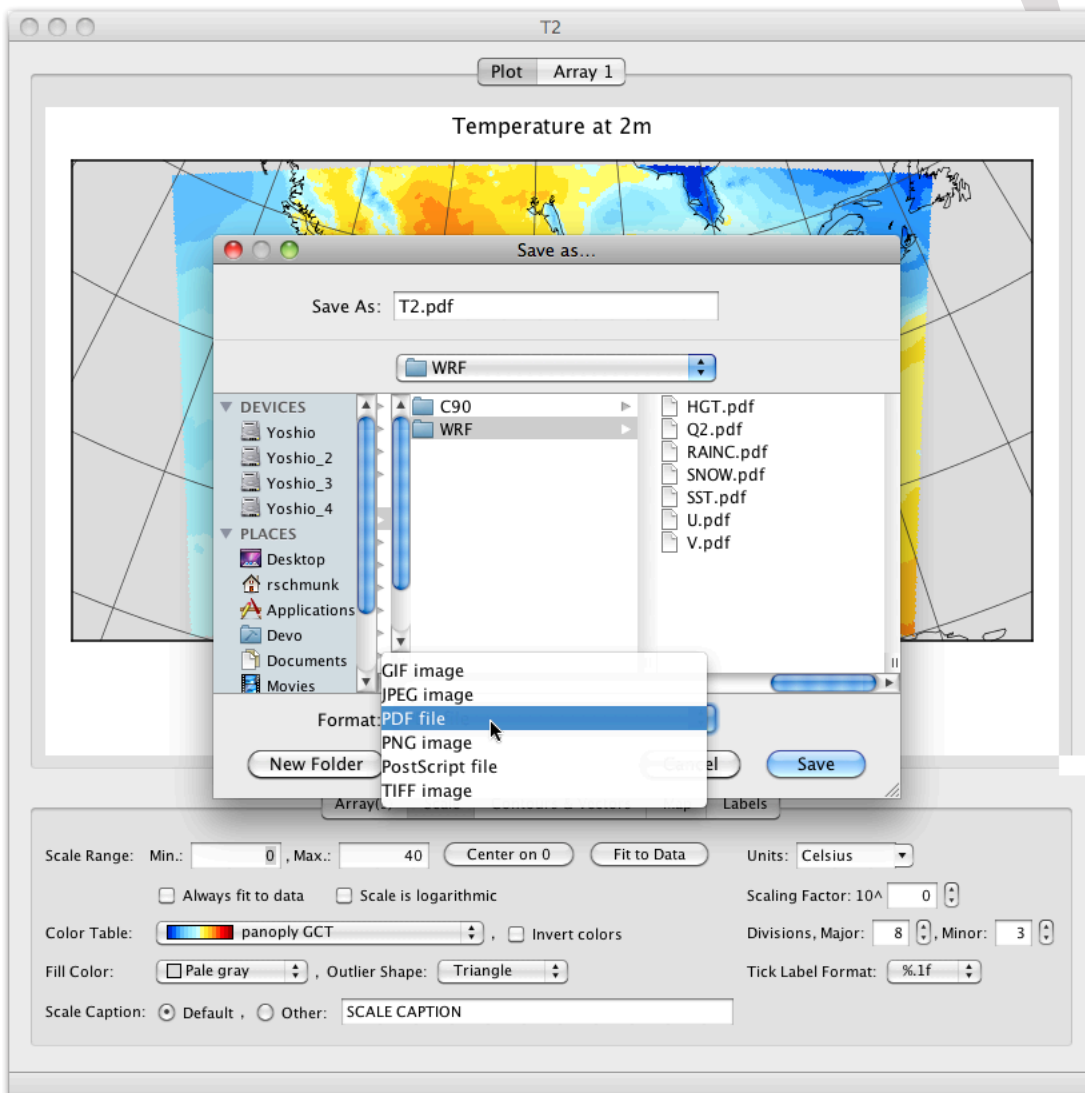


Figure 10.1

The save-file dialog window includes a format menu which determines in which of the six graphics file formats the image is saved.

Four of the formats are pure raster bitmaps: GIF, JPEG, PNG and TIFF. Although the GIF and JPEG formats allow for varying amounts of compression by sacrificing image quality, Panoply writes these formats at maximum quality and no compression. The GIF format is not recommended for saving detailed plot images, especially those which use a scale colorbar with a gradient, because it is limited to a maximum of 256 colors.

The other two output formats are PDF and PostScript (PS). In both cases, Panoply writes the plot as a combination of a raster bitmap with vector line art. All parts of the plot composed of lines or text are drawn as vectors; these parts may be subsequently edited and altered in many art editing applications. However, for reasons of filesize, the detailed color area of the plot is drawn as a single raster bitmap object.

## 10.2. Exporting KMZ Files for Google Earth

If you create a map of longitude-latitude data and have applied either the Equirectangular projection or the Equirectangular (Regional) projection to the map, then you may also save the plot to disk in OpenGIS KMZ format. This file format can be opened in the Google Earth application. To save the plot in KMZ format, select the KMZ item in the Export sub-menu of the File menu.

The KMZ file is actually a ZIP file which includes two files. The first is a PNG image of just the map portion of the plot. The second is a small KML (Keyhole Mark-up Language) text file that describes the longitude and latitude bounds of the image.

## 10.3. Exporting Data Values

Panoply provides two options for extracting data from an input dataset and writing it out to disk in plain text files. To select either option, single-click on a dataset or a variable listed in the table in the Datasets Browser window. Then in the Export sub-menu of the File menu, select the desired output format. The two formats are:

- **CDL\***: This is “almost CDL” text format, similar to that generated by the `ncdump` command-line tool in the netCDF software libraries. It differs from pure CDL in that extra nested brackets are added around data value arrays. These must be removed if you wish to subsequently use the file to create a new netCDF file via the `ncgen` utility. If a dataset has been selected for export, the entire file will be written out. If a variable has been selected, then that variable plus all the dataset header metadata is written.
- **CSV**: This option is only available when you select a variable, not a dataset. The export routine writes out the variable as comma-separated values in a plain text file. Line breaks are inserted after each row of data. If the variable has three or more dimensions, a blank line is printed between each two-dimensional slice of data.

As an alternative to using the Export menu, you can also invoke a shortcut menu and select the desired output format. If you have a two-button mouse, right-click on the variable name in the Datasets Browser table; if you have a one-button mouse, control-click on it. In Fig. 10.2, a variable named *CMFDT* has been selected for export and this shortcut menu invoked.

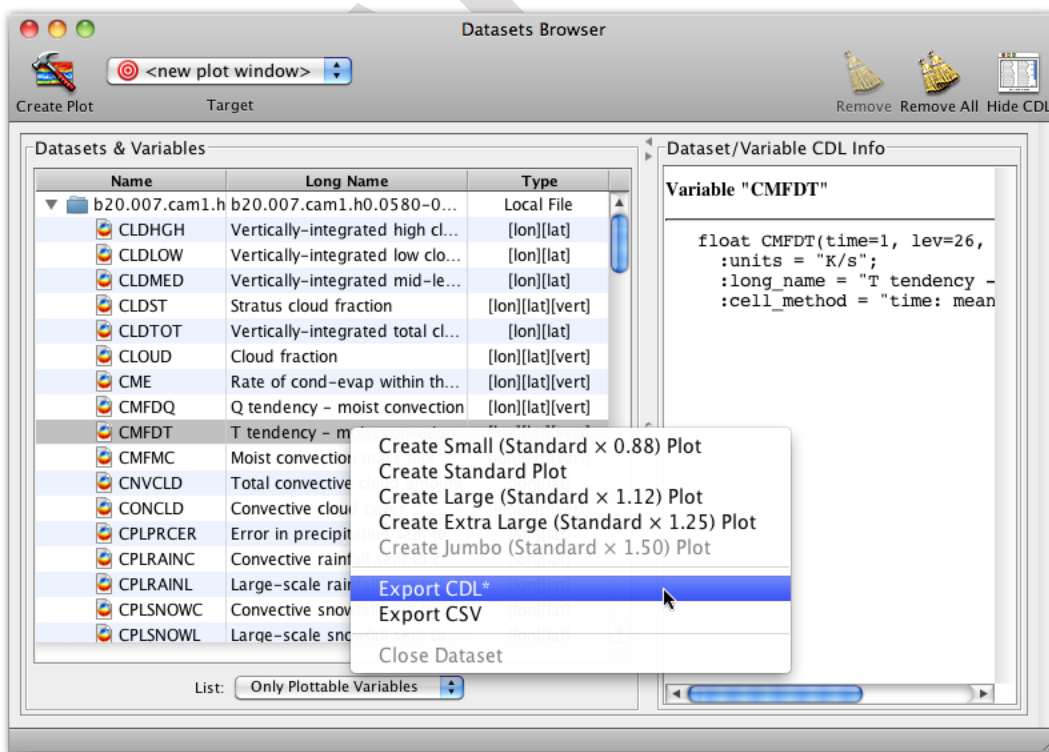


Figure 10.2